STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Futureguard Building Products, Inc.	)	**Departmental**
Androscoggin County	)	**Findings of Fact and Order**
Auburn, Maine	)	**Air Emission License**
A-207-71-J-R (SM)	)	

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Futureguard Building Products, Inc. (Futureguard) of Auburn, Maine has applied to renew their Air Emission License, permitting the operation of fuel burning equipment at their production facility primarily making awnings.

B. Futureguard is authorized to operate the following air emission units:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Fuel Type, %Sulfur	Maximum Firing Rate (gal/hr)	Stack #
Boiler #1	12.5	#6, 2.0%	83.5	1
Boiler #2	14.6	#6, 2.0%	97.6	1
Heater	1.5	Propane	16.4	2
Drier 1	1.5	Propane	16.4	3
Drier 2 *	0.8	Propane	8.7	4

* The 0.8 MMBtu/hr drier is considered insignificant according to Appendix B of 06-096 CMR 115 of the Department regulations and is listed only for inventory purposes. Also, Futureguard operates three rooftop Carrier HVAC units with design heat input capacities of 0.36 MMBtu/hr, 0.12 MMBtu/hr, and 0.23 MMBtu/hr. These units are also considered insignificant.

C. Application Classification

The application for Futureguard does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only and has been processed through Major and Minor Source Air Emission License Regulations, 06-096 CMR 115 (last amended December 24, 2005). With the fuel limit on boilers the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

Process Description

Futureguard Building Products, Inc. (Futureguard) manufactures fabric and aluminum retractable awnings. Facility operations consist of metal cleaning, metal coating, awning assembly, awning stitching. This narrative describes just the major operations that are applicable to the facility's air license.

Raw stock in the form of aluminum metal and acrylic & vinyl fabric are offloaded in the Warehouse and transported to the Storage Area where they are sorted and stored on racks. The aluminum stock is measured, cut and punched in the Fabrication Room. All particulates generated from these operations are captured in particulate filters located inside, near the cutting operations. The aluminum components are then moved into the Coating Operations Area where they are hung on a vertical conveyor system that moves each piece through "spray area enclosures" associated with a three-stage washer system. The purpose of the three stage washer system is to clean and rinse each component prior to being coated

with dry powder coatings. The first stage sprays a phosphate and water cleaning solution onto each component. Then each component is transported through the second and third stage enclosures, where rinse water is sprayed onto them removing any remaining residue from the phosphate washing operation. Remaining liquids from each of the three stages are collected into three separate holding tanks where the liquids are re-circulated back into each spraying operation. The holding tanks are periodically drained, cleaned and refilled with new solutions to ensure that all aluminum components are cleaned to manufacturing specifications that will ensure a clean surface for proper powder coating adhesion.

From the three stage washer system, the aluminum components are slowly transported through drying enclosures where they are dried prior to being powder coated. The propane-fired dryer heaters are supplied with propane gas, stored in six 1,000 gallon propane tanks located outside the facility. Following the drier enclosures, each component slowly moves through an electrostatic powder coating enclosure, where each component is coated with dry powder coating. The components are then transported to an area within the Coating Operations Area where they remain until completely dried. Once dried, the aluminum components are then moved to the Retractable Assembly Area where they are assembled with fabric into retractable awnings. A large inkjet printer is used to print designs onto POP displays utilized at dealer locations (ie. Home Depot, Lowes, etc). Small amounts of ink and solvents are generated from the cleaning of the inkjets associated with the printer. The waste ink and solvent are properly managed as a hazardous waste in accordance with the Maine Hazardous Waste Management Rules and eventually transported by an Environmental Protection Agency (EPA)-licensed transported to an EPA-licensed hazardous waste disposal facility. Futureguard is classified as a Small Quantity Generator of hazardous waste. Employees who manage hazardous waste and universal waste have received training on the proper waste management requirements. VOC emissions from the printing and powder coating operations are estimated to be less than 0.5 tons per year, therefore these processes are considered insignificant per 06-096 CMR 115 Appendix B Section B.

The facility is heated by two No.6 oil-fired boilers located in the Boiler Room. No.6 oil is supplied to each boiler by two 10,000 gallon underground storage tanks (USTs). The USTs are registered with the Maine Department of Environmental Protection (MEDEP) and are tested each year by a MEDEP Certified Tank Installer. The results of these tests are submitted annually (by July 1st) to the MEDEP. These tanks are below the thresholds for applicability to the state regulation 06-096 CMR 111 and below the threshold for the federal regulation 40 CFR Part 60 Subpart Kb.

B. Fuel Burning Equipment

Boilers

Futureguard operates Boilers #1 and #2 primarily for facility hot water and heating needs. Boiler #1 has a maximum design heat input capacity of 12.5 MMBtu/hr firing #6 fuel oil, with a maximum sulfur content not to exceed 2.0% by weight. Boiler #2 has a maximum design heat input capacity of 14.6 MMBtu/hr firing #6 fuel oil, also with a maximum sulfur content not to exceed 2.0% by weight. Boilers #1 and #2 were both manufactured prior to 1989 and are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc.

The regulated pollutants emitted from Boilers #1 and #2 are particulate matter (PM), particulate matter with a diameter smaller than ten microns (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_X), carbon monoxide (CO), and volatile organic compounds (VOC). Based on the size of Boilers #1 and #2, and the quantity of pollutants that could potentially be emitted, it is determined by the Bureau of Air Quality that any add on pollution control device would be economically unjustified. Therefore, BPT for Boilers #1 and #2 shall be the firing of #6 fuel oil with a maximum sulfur content not to exceed 2.0%.

A summary of the BPT analysis for Futureguard's boilers is the following:

1. The total fuel use for the facility shall not exceed 150,000 gallons per year of #6 fuel oil based on a 12 month rolling total.
2. The SO_2 emission limits are based on the firing of #6 fuel with a maximum fuel sulfur content of 2.0% by weight.
3. Fuel Burning Equipment Particulate Emission Standard, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. The PM_{10} limits are derived from the PM limits.
4. NO_x emission limits are based on data from similar oil fired boilers of this size and age. NOx emissions are based on a BPT emission rate of 0.4 lb/MMBtu.
5. CO and VOC emission limits are based upon AP-42 data dated 9/96. Visible emissions from the boilers shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period.

Dryers and Heater

Futureguard is licensed for two propane fired units, a dryer and a heater. The maximum design capacities of these units are 1.5 MMBtu/hr each. These units are considered small and emissions are expected to be minimal. BPT for these units will be the use of propane and limiting visible emissions to 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

C. Facility Emissions and Fuel Use Caps

Futureguard shall limit the fuel use to less than 150,000 gallons per year of #6 fuel oil with a maximum sulfur content not to exceed 2.0% by weight. Emissions from the dryer and heater are based on the maximum amount of fuel that could be combusted in the units. Emissions from the facility shall not exceed the following totals based on maximum operation.

Total Licensed Annual Emissions for the Facility
(Tons/year)
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boilers	2.3	2.3	21.2	4.5	0.4	0.1
Dryer and Heater	1.6	1.6	0.1	2.7	0.5	0.1
Total TPY	**3.9**	**3.9**	**21.3**	**7.2**	**0.9**	**0.2**

III. AMBIENT AIR QUALITY ANALYSIS

According to the 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

Pollutant	Tons/Year
PM	25
PM_{10}	25
SO_2	50
NO_x	100
CO	250

Based on the above total facility emissions, Futureguard is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-207-71-J-R subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been

necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boilers**

A. Total fuel use for Boiler #1 and Boiler #2 shall not exceed 150,000 gal/yr of #6 fuel oil with a maximum fuel sulfur content of 2.0% by weight. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and sulfur content of the fuel delivered. Records of annual fuel use shall be kept on a 12- month rolling total basis.
[06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.20	06-096 CMR 103(2)(B)(1)(a)
Boiler #2	PM	0.20	06-096 CMR 103(2)(B)(1)(a)

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	2.5	2.5	23.7	5.1	0.5	0.1
Boiler #2	2.9	2.9	27.5	5.9	0.5	0.1

D. Visible emissions from each boiler shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(17) **Dryer and Heater**

A. Emissions from the propane-fired dryer and heater shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Dryer	PM	0.12	06-096 CMR 103(2)(B)(1)(a)
Heater	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

B. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Dryer	0.2	0.2	0.1	0.3	0.1	0.1
Heater	0.2	0.2	0.1	0.3	0.1	0.1

C. Visible emissions from each propane fired unit shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(18) **General Process Sources**
Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(19) For Insignificant or Trivial Activities, pursuant to 06-096 CMR 115, the licensee shall have on file at the facility a demonstration of the total emissions from the insignificant or trivial activities not addressed in the Air Emission License for all regulated pollutants.

(20) Futureguard shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 27th DAY OF October 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks for
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 3, 2007
Date of application acceptance: December 12, 2007

Date filed with the Board of Environmental Protection: _____

This Order prepared by Edwin Cousins, Bureau of Air Quality.

FILED
OCT 29 2008
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE